CVC 300

COMPONENT VIDEO TO RGB CONVERTER

- Converts interlaced or progressive scan component video to RGBHV or RGBS
- Supports all standard definition and high definition analog component video formats
- Precise bi-level or tri-level sync detection and conversion
- User-selectable input color space format

The Extron CVC 300 is a universal, high definition component video to RGB converter. It accepts all common analog component video formats as well as RGsB up to HDTV 1080p/60 and 1920x1200, and outputs RGBHV or RGBS. The CVC 300 is ideal for use in applications that require integration of devices with component video output into RGB-based A/V system designs.

DESCRIPTION

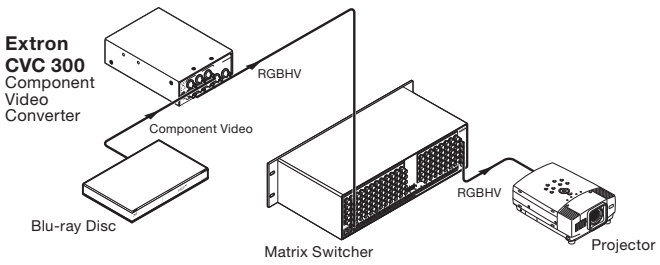
The Extron **CVC 300** is a universal, high definition component video to RGB converter. It accepts all common analog component video formats, as well as RGsB, from 480i and 576i to HDTV 1080p/60 and 1920x1200. The CVC 300 supports interlaced or progressive scan video with bi-level or tri-level sync, and decodes the incoming component video signal for output as RGBHV or RGBS. The CVC 300 is ideal for use in applications that require the integration of devices with component video output, such as DVD players, DTV tuners and DVRs, or game consoles, into RGB-based A/V system designs.

FEATURES

- **Supports all standard definition and high definition analog component video formats** – Accepts Y,R-Y,B-Y and Y,Pb,Pr component video formats as well as RGsB, from 480i and 576i up to HDTV 1080p/60 and 1920x1200.
- **Converts interlaced and progressive scan component video to RGBHV or RGBS** – Decodes all common color-difference component video signals to RGB and composite or H+V sync.
- **Precise bi-level or tri-level sync detection and conversion** – Detects and maintains the relative timing of sync signals during the component video to RGB conversion process.
- **User-selectable input color space format** – A front panel rotary switch allows for selection between interlaced or progressive scan component video, RGsB, and Betacam color space formats.
- **Rack-mountable 1U, quarter rack width metal enclosure**
- **External universal power supply included**

ROTARY POSITIONS	RESOLUTIONS	OUTPUT
1 - YUV HD	720p, 1080i, 1080p	RGBHV
2 - RGsB	480i/p, 576i/p, 640x480-1920x1200	RGBHV
3 - YUVi/p	480i/p / 576i/p	RGBHV
4 - RGsB HD	720p, 1080i, 1080p	RGBHV
5 - Betacam 50	480i / 576i	RGBHV
6 - Betacam 60	480i / 576i	RGBHV
8 - RGsB	480i/p, 576i/p, 640x480-1920x1200	RGBS
9 - YUVi/p	480i/p / 576i/p	RGBS
A - RGsB HD	720p, 1080i, 1080p	RGBS
B - Betacam 50	480i / 576i	RGBS
C - Betacam 60	480i / 576i	RGBS

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO INPUT

Number/signal type	1 component video [HDTV, SMPTE (Y, R-Y, B-Y), and Betacam® (Y, R-Y, B-Y)] or RGsB
Connectors	3 BNC female
Nominal level	1 Vp-p for Y of component video and for G of RGsB 0.7 Vp-p for P_B, P_R, R-Y and B-Y of component video, and for R and B of RGsB
Minimum/maximum levels	0 V to 2.0 Vp-p with no offset
Impedance	75 ohms
Horizontal frequency	15.75 kHz to 100 kHz according to selected mode
Vertical frequency	50 Hz to 120 Hz
Resolution range	640x480 to 1920x1200, 480i/p, 576i/p, 720p, 1080i/p
Return loss	<-45 dB @ 10 MHz

VIDEO OUTPUT

Number/signal type	1 RGBHV, RGBS
Connectors	5 BNC female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels	RGB: 0.4 V to 1.0 Vp-p
Impedance	75 ohms
Return loss	<-35 dB @ 10 MHz
Vertical frequencies	Locked to the detected input rate

SYNC

Input type	RGsB; YUV; Y, R-Y, B-Y; YPBPR
Output type	RGBHV, RGBS
Standards	SMPTE 170M (NTSC), SMPTE 274M (1080i/p), SMPTE 293M (480p), SMPTE 296M (720p)
Input level	0.0 V to 1.0 Vp-p
Output level	0.0 V to 5.0 Vp-p
Input impedance	75 ohms (on Y or Gs connector)
Output impedance	75 ohms (on H/HV and V connectors)

GENERAL

External power supply	100 VAC to 240 VAC, 50/60 Hz, external; to 12 VDC, 2 A, regulated
Power input requirements	12 VDC, 0.5 A
Cooling	Convection, no vents
Mounting	
Rack mount	Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01); or 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126, 60-604-10)
Furniture mount	Yes, with optional MBU 125 Under Desk Mount kit (70-077-01) or MBU 129 Through Desk Mount kit (70-077-02)
Enclosure type	Metal
Enclosure dimensions	1.7" H x 4.3" W x 6.0" D (1U high, quarter rack wide) (4.3 cm H x 10.9 cm W x 15.2 cm D) (Depth excludes connectors.)
Product weight	0.8 lbs (0.4 kg)
Shipping weight	2 lbs (1 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance	
Safety	CE, CUL, UL
EMI/EMC	CE, C-tick, FCC Class A, ICES, VCCI Class A
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%.

Model	Version Description	Part Number
CVC 300	Component Video to RGB Converter	60-971-01

Specifications are subject to change without notice.

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